CHAPTER 19

HELMET, GROUND TROOPS'–PARACHUTISTS' (PERSONNEL ARMOR SYSTEM GROUND TROOPS (PASGT))

Section I. INTRODUCTION

19-1 SCOPE

This chapter provides instructions for the repair and maintenance of PASGT helmets.

19-2. COMMODITY SPECIFICATIONS

a. Item.

ITEM	SPECIFICATION
Helmet, Ground Troops'–Parachutists'	MIL-H-44099

19-3. IDENTIFICATION AND DESCRIPTION

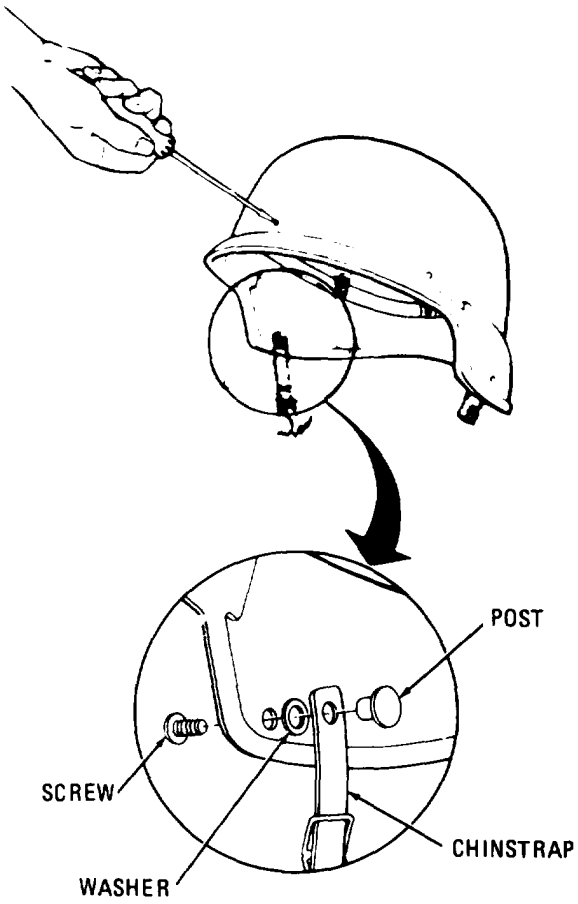
Helmet, Ground Troops'– Parachutist X-Small NSN 8470-01-092-7525, Small NSN 8470-01-092-7526, Medium NSN 8470-01-092-7527, Large NSN 8470-01-092-7528. The Ground Troops'– Parachutists' Helmet or PASGT is a rigid one-piece ballistic protective item molded of laminated Kevlar fabric, It covers the front of the head, the temple region, the ears and the lower rear region of the head. The helmet has a small brim and rubber edging around the periphery. The helmet contains a cradle suspension system, a head band employing a buckle to adjust to size, and a pull tab with pile and hook closure to make the drawstring height adjustment. The chin strap is a two point suspension open chin cup having two adjustable buckles and a single pull-the-dot snap fastener closure on the left side.

Section II. REPAIR PROCEDURES

19-4. GENERAL

The instructions in this section are for the information and guidance of organizational and direct support maintenance personnel. Cleaning and repair will be performed by personnel skilled in the particular trade applicable to their duties.

19-4. GENERAL–Continued



Suspension:

Remove the six mounting screws and A-nuts; remove the suspension. Replace new suspension and hardware if necessary by lining up the holes in the helmet, making sure the drawstring pull tab is at the rear of the helmet. Insert the A-nut (peak of A toward the rim) through the holes and replace the six screws.

Chin Strap:

Remove the screws and remove the chin strap. Replace new chin strap as shown making sure the snap fastener is on the left side of the helmet as worn.

Figure 19-1. Remove & Replace *Suspension & Chin Strap.*

19-5. INSPECTION AND CLEANING

PASGT Helmet. Inspect the PASGT helmet for split or cut rubber edging, chipped paint, raised or abraded fibers, cuts, delamination, blistering, pitting or slight indentations, loose or missing hardware on suspension system or chin strap. There is no restriction on size of chipped area o be repaired. Inspect suspension bands for tears, pulled or ripped stitching, and for cleanliness. Replace defective items. See Section IV for ordering replacement parts. Clean the helmet shell by washing it with mild soap and warm water, rinse, and air dry thoroughly. Clean head band, suspension system, and chin strap by scrubbing them with a cloth and warm soapy water. Rinse them well and allow them to air dry.

19-6. ORGANIZATIONAL MAINTENANCE

a. PASGT Helmet.

(1) Sand chipped area slightly before touch up painting, making sure not to cause any raised fibers. Clean area with a cloth.

(2) Brush on one coat of the paint listed in Section IV.

(3) Sprinkle a small amount of silica sand or walnut shell flour (Section IV) on the freshly painted area until the quantity of sand or walnut shell is equal to that in the original finish.

(4) Lightly apply a second coat of paint to cover the unpainted particles and allow the area to dry at least eight hours.

(5) Install a new suspension system and chin strap as described in Figure 19-1.

(6) Examine the inside and outside surfaces of the helmet shell for raised or abraded fibers, cuts, pitting or slight indentations. If it is determined that the above defects are limited to the outside plies only (on the inside and outside of the shell), and the defects do not extend beyond one ply deep, then the helmet shell can be repaired. If damaged extends beyond one ply deep, then the helmet shell is not serviceable. Repair of the above defects is accomplished by the following procedures:

(a) Remove paint around the immediate area of damage, making sure not to cause additional raising of fibers.

(b) Wipe clear with cloth to remove dirt and dust particles.

(c) Apply one coat of epoxy adhesive cited in Section IV to sufficiently cover damaged area. Let cure.

(d) After epoxy has cured, sand lightly and blend smoothly into shell.

(e) Apply second coat if required.

(f) Apply paint as described in (1) through (4) above.

(g) For damage on the inside surface of the helmet shell, follow steps (b), (c), (d), and (e) above.

19-7. DIRECT SUPPORT MAINTENANCE

a. PASGT Helmet.

(1) Remove suspension systems and chin straps. (See Figure 19-1.)

(2) Wash the helmets 10-15 minutes in a 0.5 percent soap solution (NSN 7930-00-129-0815) at a water temperature of 120° F (40° C). Rinse them in clear warm water until soap is removed. Allow them to dry thoroughly in a temperature not exceeding 140°F (60°C).

(3) Examine the rubber edging for cuts, slits, and areas of non-adherence. If it is determined that the edging is no longer serviceable, then remove the edging by using a heat gun to loosen the adhesive where the edging ends butt together at rear of helmet. Once one end of the edging has been loosened, grasp edging with pliers and pull edging away from helmet while still using heat gun to loosen adhesive. Remove any remaining adhesive before installing new edging to helmet. The rubber edging, slightly longer than the periphery of the helmet, should be opened up and wound around a cylinder so that the inside of the channel is exposed. The inside of the edging should be lightly abraded with a wire brush and the adhesive cited in Section Ill applied. Adhesive should also be applied to the helmet edge. When the adhesive becomes tacky, the edging should be applied to the helmet edge. The application of the edging should start at the bench mark at the rear of the helmet and follow the periphery of the helmet completely around to the starting point at the rear of the helmet. The edging should be cut so that the ends butt each other.

(4) Examine the helmet shell for chipped paint. Repair these places without stripping the paint from the helmet. Using the paint cited in Section Ill and the procedure described in Section II paragraph 6, apint the helmet, except that the second coat should cover the entire outside of the helmet (including rubber edging).

(a) Examine the inside and outside surfaces of the helmet shell for blistesrs. If it is determined that the defects limited to the outside plies only (on the inside and outside of the shell), and the defects do not extend beyond one ply deep, then the helmet shell can be repaired. If damage extends beyond one ply deep, then the helmet shell is not serviceable. Repair of the above defect is accomplished as follows:

1. Remove paint around the immediate area of damage, making sure not to cause additional raising of fibers.

2. Make a single cut in the blister (fabric ply) with a sharp knife sufficiently long enough to allow placing of epoxy resin under the cut ply.

3. Insert epoxy resin (cited in Section Ill) under ply in sufficient quantity to achieve a strong bond.

4. Apply pressure to defect area to ensure mating of plies.

5. After epoxy has cured, sand lightly and blend smoothly into shell.

6. Apply second coat of resin if required.

7. Apply paint as described in paragraph 19-6.

19-7. DIRECT SUPPORT MAINTENANCE - Continued

(5) Install replacement suspensions and chin straps. Replace any damaged or missing hardware (screws, A-nut or posts). Insert new head band beneath the suspension system.

(a) Examine the inside and outside surfaces of the helmet shell for delaminations. If it is determined that the defect is limited to the outside plies only (on the inside and outside of the shell), and the defect does not extend beyond one ply deep, then the helmet shell can be repaired. If damage extends beyond one ply deep then the helmet shell is not serviceable.

(b) Repair of the above defect is accomplished as follows:

1. Remove paint around the immediate area of the damage. making sure not to cause additional raising of fibers.
2. Wipe dean with cloth to remove dirt and dust particles.
3. Apply one coat of epoxy adhesive under raised ply. Apply pressure to defect area to ensure mating of plies.
4. After cure is achieved, sand lightly and blend smoothly into shell.
5. Apply second coat if required.
6. Apply paint (if damage was on outside of shell) as described in parqraph 19-6.

19-8.. INSPECTION

The inspection or quality control unit is responsible for determining compliance with repair instructions and requirements for classifications. In-process inspections will be performed for quality of workmanship and correct application of repair procedures. The completed item will be inspected for serviceable appearance and condition to insure against return of a substandard product to supply channels.

Section III. MATERIALS

SMR CODE	NATIONAL STOCK NUMBER	DESCRIPTION	UNIT OF ISSUE
PCOZZ	8010-01-055-2319	Polyurethane Coating, MIL-C-46185 Type II, Color O.D. 34088 of FED STD 595 (1 1/4 Gal Kit)	KT
PCOZZ	8010-01-144-9875	Polyurethane Coating, MIL-C-46168, Color D.D. 34087 of FED STD 595(4 GL Component A, 1 GL Component B).	KT
PAOZZ	5350-00-115-3297	Grain, Abrasive, MIL-G-5634, Type 6	LB
XBOZZ		Walnut Shell Flour, 40/1 00 Mesh.	LB
PAOZZ	8470-01-156-0372	Edging, 8-2-644-8.	YD
PCOZZ	8040-00-165-8614	Adhesive, EC 1357, (52152)	QT
PAOZZ	8470-01-092-7516	Suspension Assembly, 8-2-644-1 X-Small, MIL-S-44097	EA
PAOZZ	8470-01-082-7517	Suspension Assembly, 8-2-644-1 Small, MIL-S-44097.	EA
PAOZZ	8470-01-092-7518	Suspension Assembly, 8-2-644-1 Medium, MIL-S-44097.	EA
PAOZZ	8470-01-092-7519	Suspension Assembly, 8-2-644-1 Large, MIL-S-44097.	EA
PAOZZ	8470-01-144-2813	Screw, 8-2-644-6.	EA
PAOZZ	8470-01-144-5368	A-nut, 8-2-647	EA
PAOZZ	8470-01-092-7534	Strap Assembly Chin, 2-1-1400, MIL-S-44091.	EA
PAOZZ	8470-01-144-5367	Post, 8-2-647.	EA
PAOZZ	8470-01-144-2811	Screw, 8-2-644-5.	EA
PAOZZ	8470-01-144-2812	Washer, 8-2-644-7.	EA
PAOZZ	8470-01-082-8492	Headband Assembly, 1-2-1384-1 X-Small, MIL-H4098.	EA
PCOZZ	8040-00-162-9704	Adhesive, Paste, 2 oz., PN: Devcon 2 Ton (Clear Epoxy), CAGEC 16059	KT

Section III. MATERIALS - Continued

SMR CODE	NATIONAL STOCK NUMBER	DESCRIPTION	UNIT OF ISSUE
PAOZZ	8470-01-092-8493	Headband Assembly 2-1-1384-1 S, M, L, MIL-H-44088.	EA
PAOZZ	8470-01-144-2814	clip, 2-1-1384-7.	EA
PAOZZ	8470-01-092-8494	Pad, Ground Troops-Parachutists' Helmet, MIL-P-44081.	EA
PAOZZ	8470-01-082-7524	Srap, Retention, Ground Troops-Parachutist's Helmet, MIL-S-44022.	EA
PAOZZ	8415-01-103-1349	Cover, Helmet, Camouflage, Daytime Desert Pattern, X-Sin & Sm Sizes (6 Color), MIL-C-44107, Class 3	EA
PAOZZ	8415-01-103-1350	Cover, Helmet, Camouflage, Daytime Desert Pattern, Med & Lrg Sizes (6 Color), MIL-C-44107, Class 3.	EA
PAOZZ	8415-01-144-1860	Cover, Helmet, Camouflage, White, Snow, X-Sin & Sm Sizes, MIL-C-44107, Class 2.	EA
PAOZZ	8415-01-144-1861	Cover, Helmet, Camouflage, White, Snow, Med & Lrg Sizes, MIL-C-44107, Class 2.	EA
PAOZZ	8415-01-092-7514	Cover, Helmet, Camouflage, Woodland, X-Sin & Sm Sizes, MIL-C-44107, class 1.	EA
PAOZZ	8415-01-092-7515	Cover, Helmet, Camouflage, Woodland, Med & Lrg Sizes, MIL-C-44107, class 1.	EA
PAOZZ	8415-01-111-9028	Cover, Helmet, Chemical Protective, MIL-C-44001.	EA
PAOZZ	8415-00-105-0605	Cover, Helmet, Non-Reversible, MIL-C-17502.	EA
PAOZZ	8415-01-303-8945	Cover, Helmet, Woodland Camouflage Pattern, X-Large, MIL-C-44107, Class 1.	EA
PAOZZ	8415-01-327-4824	Cover, Helmet, Desert Camouflage Pattern, Daytime 3 Color, X-Small to Small, MIL-C-44107, Class 4.	EA
PAOZZ	8415-01-327-4825	Cover, Helmet, Desert Camouflage Pattern, Daytime 3 Color, Medium to Large, MIL-C-44107, Class 4.	EA
PAOZZ	8415-01-327-4826	Cover, Helmet Desert Camouflage Pattern, Daytime 3 Color, X-Large, MIL-C-44107, Class 4.	EA
PAOZZ	8415-01-110-9981	Band, Helmet, Camouflage MIL-B-1851.	EA
PAOZZ	8470-01-303-8946	Headband, Ground Troop, X-large, CAGEC 81348 MIL-H-44098	EA

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